

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 92 - 142

SITE CLEANUP REQUIREMENTS FOR:

SANTA FE PACIFIC PIPELINE PARTNERS, L.P
SAN JOSE TERMINAL, SAN JOSE, SAN CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

Description of Discharger

1. Santa Fe Pacific Pipeline Partners, L.P., (hereinafter called the Discharger) owns and operates a petroleum fuel storage and distribution facility (hereinafter called the Facility), at San Jose terminal in the City of San Jose. The Facility currently stores gasoline, diesel fuel, and jet fuel.

Location of Facilities

2. San Jose terminal is a 300 acre Facility located at 2150 Kruse Drive in the City of San Jose. Dado Street is adjacent to the west and north and Coyote Creek adjoins the east.

Lithology

3. The Discharger investigated the lithology of the Facility to a maximum depth of 50 feet below ground surface. Within the 50-foot depth, three interbedded strata can be identified as follows:
 - a. Fill Zone - This is the uppermost soil layer of the Facility and consists of several feet of materials including debris, silty clay, asphalt concrete, aggregate and clayey sand. Fill thickness is about 3 feet at the site;
 - b. Silty Sand - The layer consists of several 2 feet to 4 feet of silty sand broken up by 1 foot to 3 feet thick lenses of silty clay and gravelly sand; and,
 - c. Silty Clay - At about 12 feet to 14 feet, the substrate changes to silty clay which extends beyond the well completion depths, which are about 30 feet below ground surface. The Discharger has noted the presence of sand stringers and evidence of fractures in this layer.
4. In general, the Discharger states that the Facility is underlain by interbedded sequences of silty sands, gravelly sands and silty clays transected by ancient meandering stream channels. These ancient stream channels are the primary water bearing zones underlying the facility.

Hydrology

5. The Discharger investigated the shallow (<50 feet) hydrology of the facility. Saturated groundwater conditions was encountered in the Silty Clay layer at about 20 feet and 30 feet

below ground surface, however the potentiometric level for both levels is about 19 feet below ground surface. The groundwater gradient in most areas of the site is about 0.002 ft/ft to 0.005 ft/ft and flows toward the east (Coyote Creek) and north (Dado street). The hydraulic conductivity of the permeable and fractured silty clay layer is about 3.51×10^{-3} cm/sec.

Storm Water and Groundwater Discharge Systems

6. Over the years the Facility has managed its groundwater and storm water as follows:
 - a. On September 28, 1987, the Discharger began the operation of its groundwater recovery / treatment system. The recovery system consist of a recovery well from which a pneumatic pump and skimmer assembly extract both ground water and floating hydrocarbon product which is collected and discharged to an oil water separator. The treatment system consisted of two activated carbon units operated in series to remove dissolved hydrocarbon from the water from the oil / water separator. Water from the treatment system is discharged to a catch basin which is connected to storm drainage piping in the terminal. On several occasions, discharges from this system violated their 1987 discharge permit provisions;
 - b. Presently, free product / groundwater recovery has been suspended. The Discharger's NPDES permit has been issued pursuant to the provisions of Order 91- 056, NPDES NO. CA0029815. Additional equipment and treatment was required as conditions for the permit. The Discharger is in the process of modifying their treatment system to meet requirements for discharging to the storm sewer. About four recovery wells will be used for free product recovery.
 - c. Stormwater from the facility is discharged through the Facility's drainage system into the City's storm sewer.
 - d. Process water from the Facility is collected and treated in the treatment system and discharged to the San Jose / Santa Clara Sanitary Sewer

Groundwater Contamination

7. Groundwater contamination at the site was discovered during the September, 1986 investigation of soil and groundwater underlying the site. About 27 monitoring wells and 4 recovery wells has been installed at different location and depth to determine the extent of contamination. Free phase hydrocarbon and dissolved hydrocarbon constituents has been consistently detected in some of the monitoring well.
8. In a July 25 1991 letter to the Regional Board, the Santa Clara Valley Water District explained that the facility's case was referred to the Regional Board for possible enforcement due to delays in the implementation of migration control measures. Quarterly monitoring reports between 1989 and 1992 continues to indicate decreased thickness of free product and dissolved hydrocarbon constituents. However significant withdrawal of free product and groundwater has not occurred since the 1990 shut down of the recovery system. This then suggest that the decreasing thickness of free product might be due to increased spread and migration of contaminants.
9. Quarterlys monitoring reports and investigation reports submitted by the discharger summarized the contamination in the loading rack area as follows:

- a. In a July 13, 1992 quarterly report free phase liquid petroleum hydrocarbons were detected in 4 monitoring wells in thicknesses as high as 0.92 feet in well MW-2 and as low as 0.01 feet in well MW-12. During the January 25, 1990 investigation free product thickness was as high as 2.45 feet in well MW-2 and in an April 9, 1987 subsurface investigation lead concentration in free product was as high as 2546 ppm;
 - b. The July 13, 1992 quarterly report indicates that groundwater from monitoring wells not containing free product were sampled and analyzed for contaminants. Contaminant concentrations were as high as 47 mg/L for Total Petroleum Hydrocarbons (TPH) as gasoline, 1900 ug/L for Benzene, 6200 ug/L for Toluene and 11000 ug/L for Xylene. Analysis and sample preparation method includes EPA method 5030 / 8015 modified for TPH and EPA method 5030 / 602 for the volatile organics. However in the May 1991 quarterly report, contaminant concentrations were as high as 1700 ppm for Total Petroleum Hydrocarbons (TPH) as gasoline, 18 ppm for Benzene, 75 ppm for Toluene and 150 ppm for Xylene. Analysis and sample preparation method includes EPA method 5030 / 8015 modified for TPH and EPA method 5030 / 8020 for the volatile organics;
10. The July 14, 1992 quarterly report submitted by the discharger summarized the contamination in the tank farm area as follows:
- a. Free phase liquid petroleum hydrocarbons were detected in monitoring well MW-13 in thickness of 0.01 feet. The 1991 quarterly monitoring report indicated free product thickness as high as 0.58 feet in well MW-13;
 - b. Groundwater from monitoring wells not containing free product was sampled and analyzed for contaminants. Contaminant concentrations were as high as 4000 mg/L for Total Petroleum Hydrocarbons (TPH) as gasoline, 5800 ug/L for Benzene, 13000 ug/L for Toluene and 24000 ug/L for Xylene in well MW-23. Analysis and sample preparation method includes EPA method 5030 / 8015 modified for TPH and EPA method 5030 / 602 for the volatile organics. However in the 1991 quarterly report, contaminant concentrations were as high as 1700 ppm for Total Petroleum Hydrocarbons (TPH) as gasoline, 8000 ug/L for Benzene, 22000 ug/L for Toluene and 51000 ug/L for Xylene. Analysis and sample preparation method includes EPA method 5030 / 8015 modified for TPH and EPA method 5030 / 8020 for the volatile organics.

Soil Contamination

11. During investigations documented in the April 9, 1987 "Subsurface Spill Investigation Report" and the December 10, 1986 "Subsurface Assessment Report" the Discharger collected and analyzed several soil samples from different depths and locations for TPH and volatile organics. A summary of the analysis is as follows:
 - a. Soil samples analyzed for Total Petroleum Hydrocarbon as gasoline (EPA method 8015/5020) were as high as 17,000 mg/kg at 27 feet depth and 6,500 mg/kg at 15 feet depth below ground surface;
 - b. Soil samples analyzed for volatile organics (EPA method 602) had concentrations of benzene as high as 852 mg/kg at 15 feet depth, toluene as high as 129 mg/kg at 15 feet depth and, xylene as high as 97 mg/kg at 15 feet depth below ground surface.

Groundwater Remedial Actions.

12. The Discharger completed the installation and started the operation of the free product recovery/treatment system in September 1986. The system continued to operate until 1989, except on instances where modification and adjustments are needed. The recovery system was shut down in 1990 and has not been re-opened due to its inability to meet the NPDES requirements. About 31,230 gallons of groundwater and 726 gallons of free petroleum product was recovered by March 1989 prior to the shut down. However the continued presence of free product in some monitoring wells and possible migration of contaminants suggests that the recovery system should be reopened and additional remedial actions are needed to expedite clean up actions. The Discharger may consider the onsite storage of extracted groundwater and subsequent offsite disposal until the treatment system can be reinstated.

Soil Remedial Actions

13. Petroleum hydrocarbon has been released into the underlying soil to depths of 27 feet below ground surface. Soil cleanup action has not been implemented to date and should be considered as part of the overall site remedial action.

Investigations Required

14. More soil and groundwater investigation is needed in the western (tank farm) areas of the facility. Due to the earlier leaks and hydrocarbon plume discovered in the loading rack area of the site, most of the investigation has concentrated in that portion of the site. Soil and groundwater contamination has been detected in the tank farm area. The tank farm area should be completely characterized to determine the extent and existence of pockets of contaminated portions.
15. Groundwater recovery system should be reviewed with a view to tripling the average (0.68 gal/minute) groundwater / free product recovery rate of the recovery wells. The Discharger has indicated that 4 recovery wells will be commissioned at start up, this review should investigate the possibility of increasing the number of recovery wells.
16. Investigations should be conducted to determine the possible alternative ways to begin remedial actions on contaminated soil to reduce tendency to re-contaminate groundwater.
17. Additional investigations may be required to properly define areas of off site and on site migration of hydrocarbon plume. Recent monitoring reports indicate contamination at the periphery monitoring wells which suggest that the plume continues to spread. This investigation may include studies on possible alternatives for stemming the plume migration.

Cost Recovery

18. The Executive Officer has notified the Discharger that pursuant to Sections 25270.9 and 25270.11 of Chapter 6.67, Division 20 of California's Health and Safety Code, the Discharger shall be liable to the extent of the reasonable costs actually incurred in overseeing or contracting for cleanup or abatement efforts. The Discharger has agreed to reimburse the State according to Sections 25270.9 and 25270.11.
19. Pursuant to Section 13304 of the Water Code, the Discharger is hereby notified that the Regional Board is entitled to, and may seek reimbursement (except where reimbursement is provided in the above finding) for, all reasonable costs incurred by the Regional Board to investigate unauthorized discharges of waste and oversee cleanup of such waste, abatement of the effects thereof, or remedial action, required by this Order. Upon receipt of a billing

statement for such costs, the discharger shall reimburse the Regional Board.

Basin Plan

20. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986 and amended it on August 19, 1987, July 18, 1989, December 1991 and September 16, 1992. This Order implements the water quality objectives for the Basin Plan.

Beneficial Uses

21. The existing and potential beneficial uses of the Coyote Creek and Guadalupe river are:
- a. Water contact recreation;
 - b. Non-contact water recreation;
 - c. Wildlife Habitat;
 - d. Preservation of Rare and Endangered Species;
 - e. Estuarine Habitat;
 - f. Fish migration and spawning;
 - g. Industrial service supply;
 - h. Navigation; and,
 - i. Commercial and Sport Fishing.
22. The existing and potential beneficial uses of the ground water in the area are:
- a. Municipal Supply;
 - b. Industrial Process and Service Supply; and,
 - c. Agricultural Supply.

California Environmental Quality Act

23. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321, Title 14, California Code of Regulations.

Notice and Meeting

24. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
25. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code and Section 25270 of the California Health and Safety Code, that the Discharger shall cleanup and abate the effects described in the above findings as follows:

- A. Prohibitions

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities which will cause significant adverse migration of pollutants are prohibited.
4. The discharge of contaminated groundwater or recovered free phase liquid petroleum hydrocarbons onto land, into groundwaters or surface waters is prohibited except when permitted by an appropriate authority.

B. Specifications

1. The storage, handling, treatment or disposal of soil or ground water containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The Discharger shall conduct free phase liquid petroleum hydrocarbons recovery activities, as approved by the Executive Officer, to remove all pools of free phase liquid petroleum hydrocarbons beneath the Facility.
3. The Discharger shall remediate soil and groundwater contamination, which actually or threatens to degrade water quality or adversely affect the beneficial uses of the waters of the State.
4. The Discharger shall investigate the possibility and abate any offsite or on-site migration of contaminated groundwater.
5. The Discharger shall conduct groundwater monitoring according to the Self Monitoring Program attached to this Order or as hereinafter modified by the Executive Officer.

C. Provisions

The Discharger shall comply with the Prohibitions and Specifications above according to the following task and time schedule:

1. Submit a technical report, acceptable to the Executive Officer, relating to the evaluation of the free phase petroleum hydrocarbons and contaminated groundwater recovery system. The report shall include, but not necessarily limited to a report documenting various alternative methods for enhancing the efficiency of the free product/contaminated groundwater recovery system. The Board believes that a reasonable goal of increasing efficiency should be an extraction rate increased to at least 3 times the 1989 rate of 0.68 gal/minute. The report shall include costs, brief design, location of each suggested alternative and recommended alternative.

REPORT DUE: No later than March 30, 1993.

2. Submit a technical report, acceptable to the Executive Officer, relating to the contaminated soil and groundwater including, but not necessarily limited, to the following:

- a. A plan for the investigation of horizontal and vertical extent of soil and groundwater contamination in the Facility's tank farm area. The plan shall include proposal to conduct both surface and subsurface soil and groundwater investigation.

REPORT DUE: No later than February 1, 1993;

- b. Remedial plan for contaminated soil. The plan shall include remedial alternatives, time schedule for implementation and suggested remedial option. The Discharger's technical reports under this subparagraph hereof shall include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each alternative measure. The plan shall include proposal for soil cleanup levels. The reports shall consider the guidance provided by the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" and California Regional Water Quality Control Board, San Francisco Bay Region's Guidance Document, "Discharge of Polluted Groundwater to Surface Waters, September 1985".

REPORT DUE: No later than August 1, 1993.

- c. A plan to study the extent and sources of offsite/on-site migration of contaminants at the Facility's boundary. The plan shall include groundwater and surface runoff sources. The Discharger shall include a report on methods of offsite/on-site migration control.

REPORT DUE: No later than April 30, 1993.

3. Recent groundwater monitoring reports indicate that considerable degree of contamination exists at the site and free product can still be measured in some of the wells. Most of the monitoring wells are sampled for contaminant analysis on quarterly basis. However analysis for lead contamination has been dropped in recent analyses. Groundwater measurements such as turbidity, was not included in the quarterly monitoring. Groundwater monitoring is inadequate inside the tank farm areas and requires additional wells. The Discharger shall modify its groundwater monitoring system to satisfy the above mentioned deficiency.
4. The Discharger is required to reimburse the State for all reasonable costs of the State incurred in overseeing or contracting for cleanup or abatement efforts.
5. The Discharger shall maintain a copy of this order at the project field office so as to be available at all times to project personnel.
6. Technical reports, submitted by the Discharger, in compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board on the schedule specified herein. These reports shall consist of a letter report that includes the following:
 - a. A summary of work completed since submittal of the previous report and work projected to be completed by the time of the next report;
 - b. Identification of any obstacles which may threaten compliance with the

schedule of this Order and what actions are being taken to overcome these obstacles;

- c. In the event of non-compliance with any Prohibition, Specification or Provision of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order; and,
 - d. In the first self-monitoring report, an evaluation of the current groundwater monitoring system and a proposal for modifications as appropriate.
- 7. All submittals of hydrogeological plans, specifications, reports, and documents (except quarterly progress and self-monitoring reports), shall be signed by and stamped with the seal of a registered geologist, registered engineering geologist, or registered professional engineer.
 - 8. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
 - 9. The Discharger shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
 - 10. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, submitted by the Discharger, shall also be provided to the following agencies:
 - a. City of San Jose, Planning Department;
 - b. Santa Clara Valley Water District; and,
 - c. California Environmental Protection Agency, Department of Toxic Substances Control.
 - 11. The Discharger shall permit the Board or its authorized representative, in accordance with Section 13267 (c) of the California Water Code, the following:
 - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order;
 - b. Access to copy all records required to be kept under the terms and conditions of this Order;
 - c. Inspection of any monitoring equipment or methodology implemented in response to this Order; and,
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Discharger.

12. The Discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours, or ownership of the disposal areas.
13. The Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
14. These requirements do not authorize the commission of any act causing injury to the property of another or of the public, do not convey any property rights, do not remove liability under federal, state or local laws, and do not authorize the discharge of waste without the appropriate federal, state or local permits, authorizations, or determinations.
15. If any hazardous substance, extracted groundwater or petroleum hydrocarbon is discharged in or on any waters of the state, or discharged and deposited, or probably will be discharged in or on any waters of the state, the Discharger shall
 - a. Report such discharge to the following:
 - (1) This Regional Board at (510) 286-1255 on weekdays during office hours from 8 a.m. to 5 p.m.; and,
 - (2) The Office of Emergency Services at (800) 852-7550.
 - b. A written report shall be filed with the Regional Board within five working days and shall contain information relative to the following:
 - (1) The nature of waste or pollutant;
 - (2) The quantity involved and the duration of incident;
 - (3) The cause of spill;
 - (4) The estimated size of affected area;
 - (5) The corrective measures that have been taken or planned, and a schedule of these measures; and,
 - (6) The persons/agencies notified.
16. The Board will review this Order periodically and may revise the requirements when necessary.
17. If the Discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the Discharger shall promptly notify the Executive Officer and the Board shall consider revision to this Order.

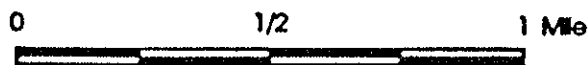
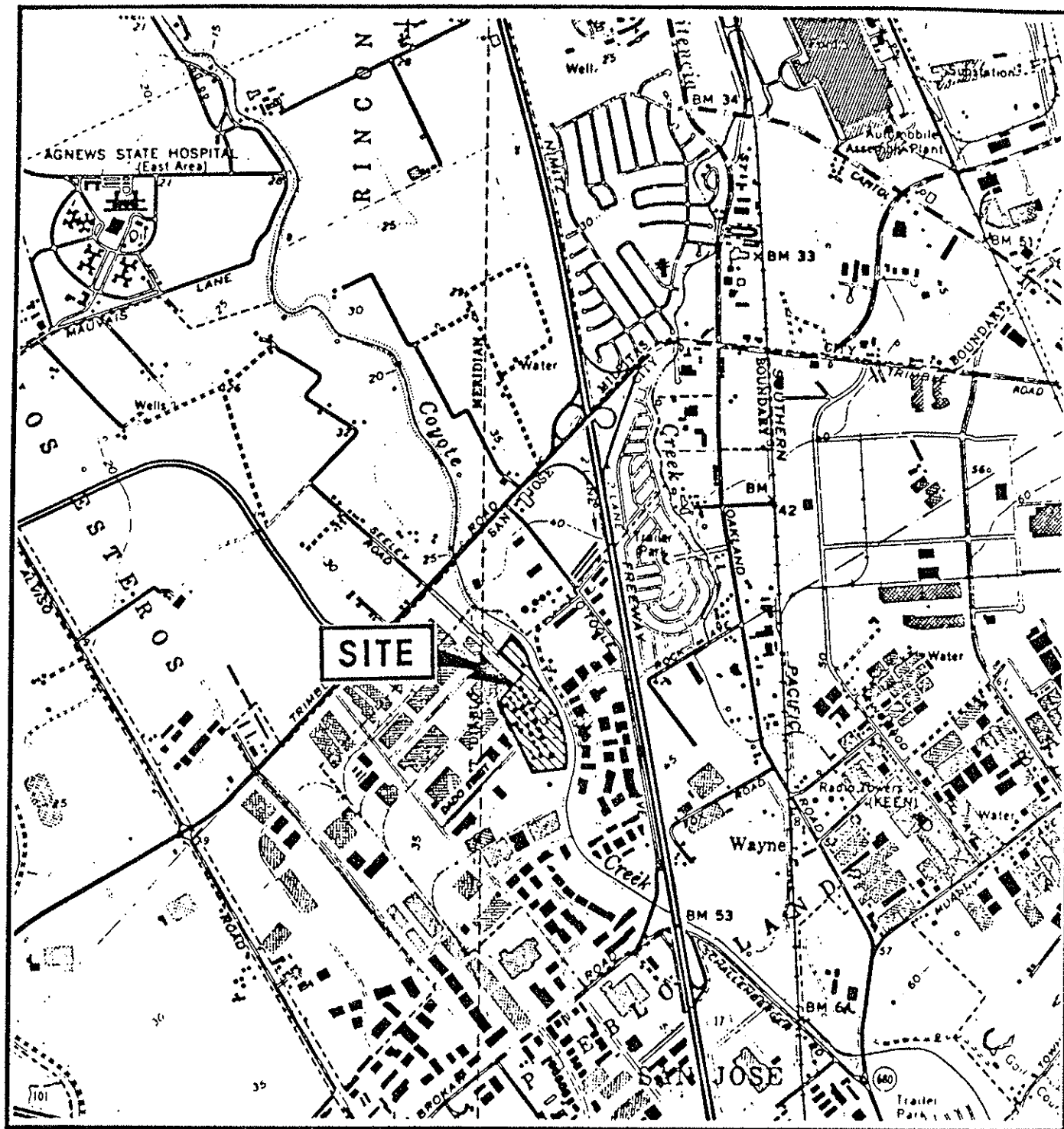
I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on November 18, 1992.



Steven R. Ritchie
Executive Officer

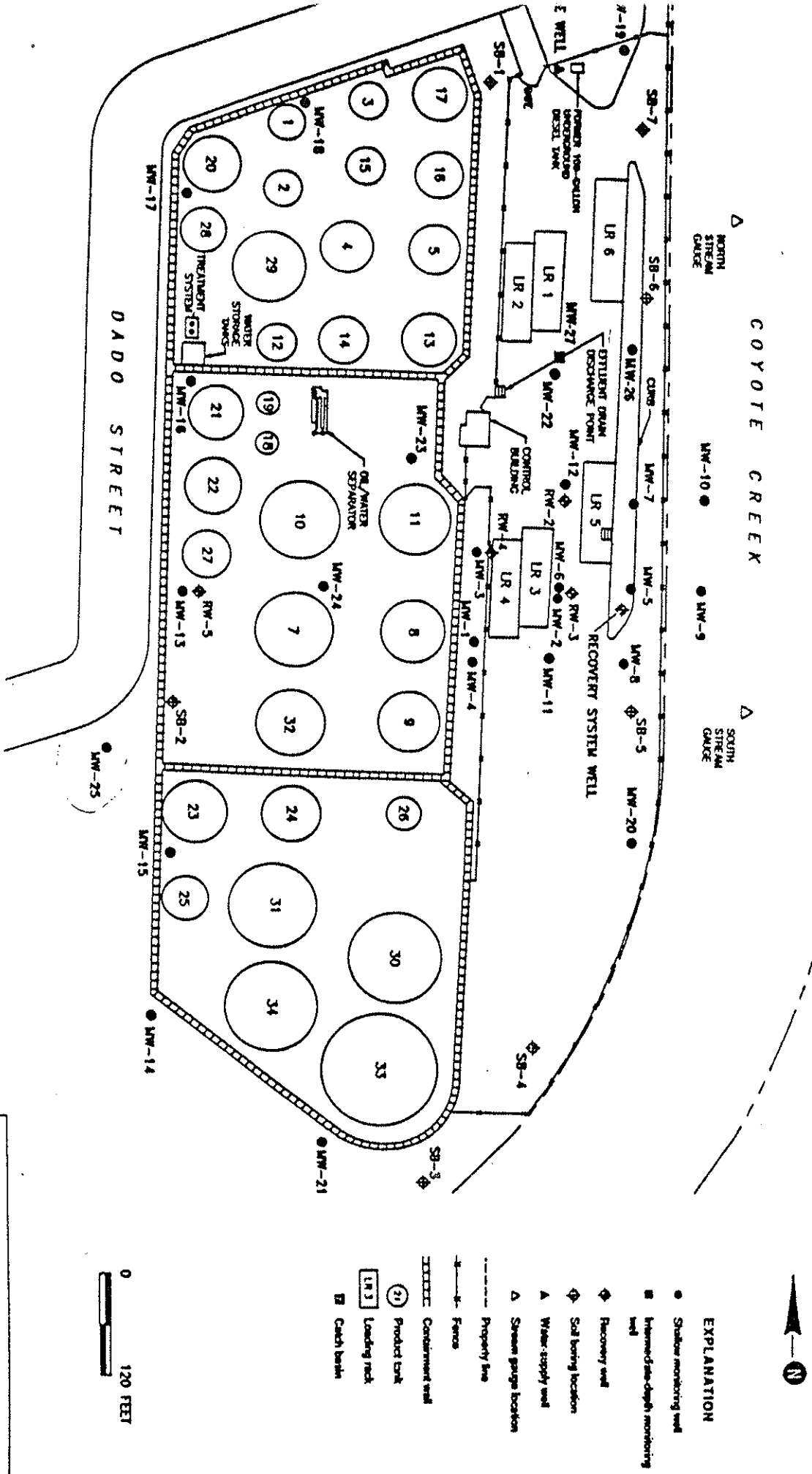
Attachments:

Figure 1: Site Vicinity Map
Figure 2: Site Plan
Self Monitoring Program



MAP SOURCE:
U.S.G.S. Milpitas, California
7.5 Quadrangle,
Photorevised 1980

Figure 1 : SITE VICINITY



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

SANTA FE PACIFIC PIPELINE PARTNERS, L.P.

San Jose TERMINAL

2150 KRUSE AVENUE

SAN JOSE, SANTA CLARA COUNTY

SITE CLEANUP REQUIREMENTS
ORDER NO. 92 - 142

CONSISTS OF

PART A

AND

PART B

PART A

A. General

1. Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No.73-16.
2. The principal purposes of a self-monitoring program by a waste discharger are the following:
 - a. To document compliance with Site Cleanup Requirements and prohibitions established by the Board;
 - b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;
 - c. To develop or assist in the development of standards of performance, toxicity standards and other standards; and,
 - d. To prepare water and wastewater quality inventories.

B. Sampling and Analytical Methods

1. Sample collection, storage, and analyses shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater, and Test Methods for Evaluating Solid Waste EPA Document SW-846, or other EPA approved methods and in accordance with an approved sampling and analysis plan.
2. Water and waste analysis (except total suspended solids) shall be performed by a laboratory approved for these analyses by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.
3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. Definition of Terms

1. A grab sample is a discrete sample collected at any time.
2. Duly authorized representative is a duly authorized representative may thus be either a named individual or any individual occupying a named position such as the following:
 - a. Authorization is made in writing by a principal executive officer, or,
 - b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general

partner in a partnership, sole proprietor in a sole proprietorship, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.

D. Schedule Of Sampling, Analysis, And Observations

1. The Discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B and the requirements in Article 5 of Chapter 15, Division 3, Title 23 of the California Code of Regulation.
2. A statistical analysis shall be performed and reported annually as described in Article 5 of Chapter 15, Division 3, Title 23 of the California Code of Regulation.

E. Records To Be Maintained By The Discharger

1. Written reports shall be maintained by the Discharger for groundwater monitoring and wastewater sampling, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:
 - a. Identity of sample and sample station number;
 - b. Date and time of sampling;
 - c. Method of composite sampling (See Section C-Definition of Terms);
 - d. Date and time that analyses are started and completed, and name of the personnel performing the analyses;
 - e. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory;
 - f. Calculation of results;
 - g. Results of analyses, and detection limits for each analyses; and,
 - h. Chain of custody forms for each sample.

F. Reports To Be Filed With The Board

1. Ground water monitoring results shall be filed monthly until the schedule allows quarterly samples, then reports shall be quarterly. Written self-monitoring reports shall be filed no later than 45 calendar days following the end of the report period. In addition an annual report shall be filed as indicated. The reports shall be comprised of the following:
 - a. Letter of Transmittal - A letter transmitting the essential points in each self-monitoring report should accompany each report. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as, operation and/or facilities modifications. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring

reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct. The letter shall contain the following certification:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- b. Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify ground water protection standards, the following shall apply and the compliance sheet shall contain:
 - i. The method and time of water level measurement, the type of pump used for purging, pump placement in the well, method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water; and,
 - ii. Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; the chain of custody record.
- c. A summary of the status of any remediation work performed during the reporting period. This shall be a brief and concise summary of the work initiated and completed as follows:
 - i. As interim corrective action measures; and,
 - ii. To define the extent and rate of migrations of waste constituents in the soil and ground water at the site.
- d. The Discharger shall describe, in the quarterly report, the reasons for significant increases in a pollutant concentration at a well on site. The description shall include the following:
 - i. The source of the increase;

- ii. How the Discharger determined or will investigate the source of the increase; and,
 - iii. What source removal measures have been completed or will be proposed.
 - e. A map or aerial photograph showing observation and monitoring station locations, and plume contours for each chemical in each aquifer shall be included as part of the quarterly Self-Monitoring Report.
 - f. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board. The following information shall be provided:
 - i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review; and,
 - ii. In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
 - g. By January 31 of each year the Discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:
 - i. Tabular and graphical summaries of the monitoring data obtained during the previous year;
 - ii. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the Site Cleanup Requirements; and,
 - iii. A written summary of the ground water analyses indicating any change in the quality of the ground water.
- G. In the event the Discharger violates or threatens to violate the conditions of the Site Cleanup Requirements and prohibitions or intends to experience a plant bypass or treatment unit bypass due to:
- 1. Maintenance work, power failures, or breakdown of waste treatment equipment, or,
 - 2. Accidents caused by human error or negligence, or,

3. Other causes, such as acts of nature.

The Discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, the waste Discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day. Such daily analyses shall continue until such time as the effluent limits or containment have been attained, until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

Part B

A. Description Of Observation Stations And Schedule Of Observations

1. The observation stations shall consist of 32 existing groundwater monitoring and recovery wells (MW-1 to MW-27, and RW-1 to RW-5), and groundwater monitoring and recovery wells installed in a future soil and groundwater characterization, remedial work or the evaluation of remedial work.
2. The schedule of well observations and grab sampling shall be conducted quarterly and within the months of January, April, July and October.

B. Observations and Test Procedures

1. The groundwater well observations shall consist of the following:
 - a. Water elevation reported to the nearest 0.1 inch for both depth to water from the ground surface and the elevation of the ground water level;
 - b. Groundwater temperature measured at the time of sampling and reported in degrees Fahrenheit;
 - c. Groundwater conductivity measured at the time of sampling as per Standard Methods 205 using potentiometric methodology;
 - d. Groundwater pH measured at the time of sampling as per Standard Methods 423 using potentiometric methodology; and,
 - e. Groundwater turbidity measured at the time of sampling.
 - f. Free phase petroleum product thickness measured using EPA approved methods.
2. The test procedures for the groundwater samples and soil samples shall be as described herein. The following section shall not apply to groundwater samples taken from wells with more than a 0.1 inch thickness of free phase petroleum hydrocarbon except in section d.:
 - a. Volatile aromatic organic compound analysis using the EPA Method 5030/8020;
 - b. Total Petroleum Hydrocarbons (TPH) and Fuel Hydrocarbons using the EPA Method 5030/8015 (Modified). Analysis shall include TPH as Total Diesel and Gasoline;
 - c. Total Oil and Grease using Standard Methods 418.1, infrared analysis;
 - d. Lead and Organic Lead using EPA Method 7420 and Department of Health Services method HML 338 respectively.

3. Quarterly reports to be filed pursuant to Part A of this Self Monitoring Program shall include a map showing the limit of groundwater contamination, direction of movement and concentration of contamination; and,

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program is as follows:

1. Developed in accordance with the procedures set forth in this Board's Resolution No. 73-16;
2. Effective on the date shown below; and,
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the Discharger.



Steven R. Ritchie
Executive Officer

November 18, 1992
Date Ordered

REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

TENTATIVE ORDER #92-143

ORDER SETTING ADMINISTRATIVE CIVIL LIABILITY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board) finds that:

1. On July 18, 1989 Zanker Road Resource Management submitted a proposed plan for temporary storage of approximately 100,000 cubic yards of soils contaminated with methyl ethyl ketone and cyclohexanone. The proposed plan was approved on July 28, 1989 for a limited period of one year upon which treatment and disposal of the soils was to be accomplished.
2. By letter of July 31, 1991, the Executive Officer granted an additional one year extension for completion of soils treatment or disposal of the soils from the site and required a technical report, by August 31, 1992, documenting compliance. This letter was a formal request for compliance pursuant to Water Code Section 13267 and warned that civil liability may be imposed if the deadline was not met.
3. Zanker Road Landfill submitted an August 17, 1992 letter report documenting non-compliance with soils remediation or disposal and requested another one year extension for completion which would extend the total time the soils are on the site from 1 year to 4 years. This request was denied.
4. The Executive Officer issued Complaint No. 92-121 to the discharger on October 14, 1992. The Complaint proposed that administrative civil liability be imposed by the Regional Board in the amount of \$12,400 in penalties pursuant to Sections 13267 and 13268 of the California Water Code. Of this amount, \$2,400 is for recovery of staff costs. The proposed liability has not been paid and the right to a hearing has not been waived.
5. The Board has fully considered the factors set forth for determination of the amount of civil liability set forth in Water Code Section 13267.
6. On November 18, 1992, the Board conducted a public hearing at which the discharger appeared and evidence was received concerning the discharger.

IT IS HEREBY ORDERED, PURSUANT TO WATER CODE SECTIONS 13268 and 13323, that Zanker Road Resource Management Ltd., Incorporated is civilly liable for this violation and shall pay administrative liability in the amount of \$27,400. The liability shall be paid to the State Water Pollution Cleanup and Abatement Account within 30 days of the date of this Order.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 18, 1992.



STEVEN R. RITCHIE
EXECUTIVE OFFICER